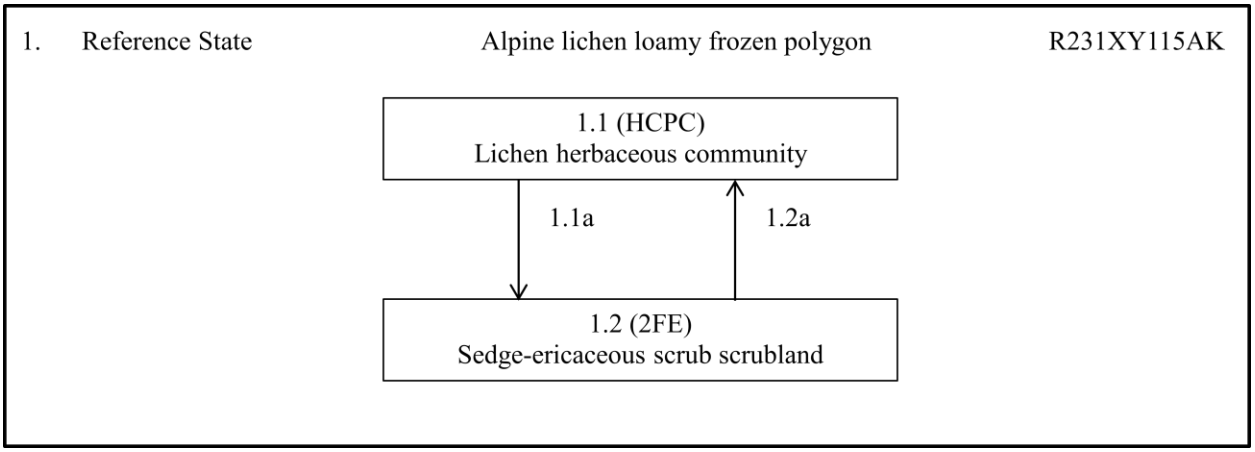
Ecological Site Description ID:	R231XY115AK

Ecological Dynamics of the Site:

This alpine ecological site generally occurred on the summit and shoulders of mountains with low slopes (i.e. < 10% slopes). In this ecological site, cryoturbation resulted in patterned ground features known as polygons. Observed polygons each had two associated climax plant communities and the vegetation was likely dependant on the degree of soil saturation. The two plant communities were termed polygon face (community 1.1 and 1.2) and moist interspace. Soils associated with the moist interspace plant community were wetter when compared to soils associated with the polygon face plant community. For community phase 1.1, soils were classified as histoturbels and were composed of organic matter over loamy cryoturbate. The polygon face plant community was detailed in this report, while the moist interspace was detailed in the report for R231XY102AK. Fire was a documented disturbance resulting in one additional observed phase.

State and Transition Diagram:



State ID Number:	1	State Name:	Reference
State Narrative:	For the climax phase, dominant vegetation was lichen. Soils associated with the polygon face were drier when compared to soils associated with the polygon moist interspaces.		

Photo 1.1	

Community Phase Number:	1.1	Community Phase Name:	Lichen herbaceous community

Community Phase Narrative:
This community is covered extensively by an assortment of lichen species giving a creamy white appearance. Lichen cover generally exceeded 60% of plots and the most commonly observed species was *Flavocetraria cucullata*. Shrubs, graminoids, forbs, and moss were all minor components of overall community vegetative cover. When compared to the early fire phase, shrubs and graminoids occur in relatively low abundances.

Community Pathways	
Pathway Number	Pathway Name & Description
1.1a	Fire. A lack of exposed mineral soil in recently burned sample plots indicated a low-intensity fire regime for this ecological site.

Photo 1.2	

Community Phase Number:	1.2	Community Phase Name:	Sedge-ericaceous scrub scrubland

Community Phase Narrative:
When compared to the unburned community above, this early fire sere has reduced lichen cover and increased shrub and graminoid cover. A common low shrub was *Ledum palustre* while a common dwarf shrub was *Vaccinium vitis-idaea*. Graminoids were the most abundant vegetation class totaling roughly 60% cover and were primarily composed of *Carex sp.* and *Eriophorum sp.*. While lichens were observed in this burn sere, their observed abundance likely decreased as a result of the fire. A field observation was that the fire produced channelized patterns across the surface of the polygon face, which could be the result of a low intensity burn.

Community Pathways	
Pathway Number	Pathway Name & Description
1.2a	With time and no fire.